

# GLOSSARY OF LOW-SLOPE ROOFING TERMS

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| <b>ACCEPTED ROOFING MATERIALS:</b>  | Selected roofing products which have undergone a comprehensive program of review and have been accepted by ARCA Warranty Ltd. for incorporation into accepted roofing systems.  |
| <b>ACCEPTED ROOFING SYSTEMS:</b>    | Roofing systems which have been accepted by ARCA Warranty Ltd. for coverage under the Warranty Certificate program as outlined in the Roofing Application Standards Manual.   |
| <b>AIR BARRIER:</b>                 | A structurally supported component of the building envelope which prevents the migration of air between the building interior and the outside environment.  |
| <b>ALLIGATORING:</b>                | A pattern of cracking on exposed bitumen similar to the appearance of an alligator's hide, due to oxidation of the bitumen.   |
| <b>AREA DIVIDER:</b>                | A roofing element usually fabricated from dimension wood components incorporated into a roofing system to subdivide large roof areas or at changes in structural deck direction or deck types, to control membrane stresses (See also Subsurface Roof Divider). |
| <b>ASPHALT:</b>                     | A bituminous material derived from the distilling of crude oil.   |
| <b>AUXILIARY LEVELLING SURFACE:</b> | A substrate material such as gypsum board, plywood or fiberboard used to provide a smooth surface to which a membrane may be adhered.   |
| <b>BACK NAILING:</b>                | The practice of fastening membrane plies so that the fasteners are covered by subsequent plies and are not exposed to the weather.  |
| <b>BALLAST:</b>                     | Loose-laid roofing gravel or pavers whose mass is used to control movement from wind uplift or floatation of insulation or the primary membrane.  |
| <b>BASE SHEET:</b>                  | A heavy sheet of saturated or coated felt or the bottom ply of a two-ply modified bitumen membrane.   |
| <b>BITUMEN:</b>                     | A generic term describing any mixture of heavy hydrocarbons in viscous form used in the roofing industry as an adhesive and waterproofing agent. Bitumens are subdivided into asphalt and coal tar pitch.   |
| <b>BONDING ADHESIVE:</b>            | The adhesive required to adhere a single ply membrane to its substrate.   |
| <b>BORDER ZONE:</b>                 | The area adjacent to the vertical junction of a roof's parapet, walls, and curbs requiring specific treatment for wind uplift resistance, fire protection, and for maintenance access with vegetated roof systems.  |
| <b>BUILT-UP ROOFING (BUR)</b>       | A continuous semi-flexible membrane comprised of plies of organic or inorganic asphalt saturated felts adhered into full inter-ply mopping of bitumen.  |

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| <b>CANT STRIP:</b>                    | A triangular shaped strip of wood or fiberboard that forms a bevelled transition for membranes between the horizontal to vertical planes.   |
| <b>CAP SHEET:</b>                     | The upper ply of two ply modified bitumen membrane which is fully adhered to the base sheet.  |
| <b>CAULKING:</b>                      | An elastomeric material used to seal and make watertight overlapping components.  |
| <b>COAL TAR PITCH:</b>                | A bituminous material derived from the coking of coal.  |
| <b>COMBINATION ROOFING DESIGN:</b>    | A roofing system designed with rigid insulation above and below the primary membrane.   |
| <b>COMPATIBLE MATERIALS:</b>          | Two or more materials or substrates that can be mixed, blended or attached without separating, reacting or affecting the materials adversely.   |
| <b>CONTROL JOINTS:</b>                | An elevated roof element used to divide roof membrane areas, to control membrane movement. May be one of two types, roof area divider or construction expansion joint.  |
| <b>CONVENTIONAL/COMPACT ASSEMBLY:</b> | A roof assembly configured with each component placed immediately on top of the preceding component; each component is in contact with the adjacent component. No space is provided for ventilation of the roof assembly. |
| <b>CONVENTIONAL ROOFING DESIGN:</b>   | A roofing system design where the insulation is installed beneath the primary membrane.   |
| <b>CRAZING:</b>                       | A series of hairline cracks in the surface of a weathered material.   |
| <b>CRICKET:</b>                       | An elevated element of a roofing system designed to direct water to drain receptacles or divert around an obstacle such as a chimney.   |
| <b>CURB:</b>                          | A wooden or metal structure surrounding roof openings or supporting mechanical equipment which permits the waterproofing membrane to terminate a minimum distance of 200 mm above the roof surface.                       |
| <b>DECK:</b>                          | The structural element to which a roofing system is applied. Also see Structural Roof Deck.   |
| <b>DEW POINT:</b>                     | The temperature at which a specific atmosphere is saturated with water vapour or at which air has 100% relative humidity.   |
| <b>DOUBLE POUR:</b>                   | Membrane protection consisting of two separate applications of a bitumen floodcoat and embedded roofing gravel.   |

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| <b>DRAINAGE LAYER:</b>                  | Component(s) that form part of the vegetated roof systems assembly providing un-impeded flow of water on the roofs surface to the roofs drainage points.  |
| <b>ELECTRONIC LEAK DETECTION:</b>       | Non-destructive testing for the purpose of locating breaches in the waterproofing layer of a roof assembly by means of a leak sensor using low voltage electrical current (See also Vector Mapping).  |
| <b>E.P.D.M.:</b>                        | Ethylene Propylene Diene Monomer, a single ply membrane manufactured from synthetic rubber.   |
| <b>E.V.T.:</b>                          | Equiviscous temperature, the optimum application temperature for a given bitumen type; provided by the bitumen's manufacturer, measured at the point of application.  |
| <b>EDGE LAP:</b>                        | The overlap of the edge of a ply over the previous ply. Also called a side lap.   |
| <b>EMULSION:</b>                        | Bitumen dispersed in water with or without a filler and held in suspension by means of an emulsifier. When the water evaporates the bitumen particles cement together.  |
| <b>EXPANSION JOINT:</b>                 | A structural separation used to permit differential movement of a structure caused by expansion and contraction of it's elements due to temperature change. A designed separation in the primary membrane to permit such movement, extending a minimum distance of 200 mm above the roof surface. |
| <b>EXTENSIVE VEGETATED ROOF SYSTEM:</b> | A light weight, low maintenance, shallow substrate typically less than 200 mm thick often vegetated with drought tolerant plants.   |
| <b>FILTER FABRIC:</b>                   | A woven inorganic cloth or geotextile used as a filter to allow passage of water while preventing the passage or migration of fines and particles in a protected membrane design or vegetated roof system.  |
| <b>FELT:</b>                            | A rolled roofing sheet consisting of organic or inorganic mats impregnated with bitumen.  |
| <b>FIRE PREVENTION TAPE:</b>            | A self-adhesive modified bitumen tape required to cover/seal substrate gaps, cracks and voids to prevent torch flame infiltration.  |
| <b>FISHMOUTH:</b>                       | Wavy or scalloped openings occurring at the lapped edges of roofing felts and membranes.  |

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| <b>FLASH OFF:</b>                     | The time required for the volatiles in a petroleum based adhesive/primer to escape into the atmosphere prior to bonding.  |
| <b>FLASH POINT:</b>                   | The lowest temperature at which vapour from heated bitumen (combustible substrate) will ignite when exposed to an ignition source but will not remain burning.  |
| <b>FORMFLASH FLASHING:</b>            | A self-adhering uncured EPDM sheet membrane that cures in place after installation, used primarily for membrane flashings.  |
| <b>GLAZE COAT:</b>                    | A thin coating of bitumen applied to the exposed ply of a built-up membrane to protect against water damage.  |
| <b>GRAVEL STOP:</b>                   | A flanged metal flashing with an upturned exterior edge, with its horizontal flange sealed to the membrane, installed to provide a finished edge for the termination of roofing components.   |
| <b>GROWING (GROWTH) MEDIUM:</b>       | An engineered blend of organic and inorganic materials specifically designed for the growth of plants on top of a buildings roof. It allows water to be absorbed and drain away without over compacting.                                      |
| <b>GUM BOX (CUPS):</b>                | A flanged, open bottomed metal container placed around a roof penetration and sealed into the primary membrane. A bitumen or polyurethane filler is installed to shed water and waterproof the penetration. Also known as a pitch pan/pocket. |
| <b>GUSSET:</b>                        | A field fabricated or manufactured membrane reinforcement ply installed at inside and outside membrane flashing corners for waterproofing continuity.   |
| <b>LANDSCAPE FEATURES:</b>            | Visible features or amenities in an area of a vegetated roof cover such as ponds, fountains, large rocks/boulders, statues, lighting, decorative pavers or stones.  |
| <b>LOOSE LAID BALLASTED SYSTEMS:</b>  | Roofing systems where assembly components are not uniformly adhered to their substrate and where ballast is employed to stabilize movement of the primary membrane and provide wind uplift resistance.  |
| <b>MECHANICALLY FASTENED SYSTEMS:</b> | Roofing systems in which roofing components or primary membrane are uniformly attached to the structural deck with mechanical fasteners in a prescribed pattern.  |
| <b>MEMBRANE:</b>                      | A continuous flexible or semi-flexible element that functions as a waterproof covering. Membrane can be single ply or multi-ply systems.  |

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| <b>MEMBRANE FLASHING:</b>          | The vertical extension of the waterproofing membrane installed at horizontal to vertical junctions at roof penetrations and membrane terminations.   |
| <b>MEMBRANE PROTECTION:</b>        | Inorganic board's or geotextile blankets that provides protection from foot and equipment traffic damaging the roof membrane.  |
| <b>MODIFIED BITUMEN MEMBRANES:</b> | Composite roofing membrane comprised of a reinforcing sheet coated on one or both sides with a polymer modified asphalt which may be surfaced with poly film, sand or mineral granules.            |
| <b>MOP AND FLOP:</b>               | An application procedure in which the roofing material is placed upside down and coated with hot bitumen then turned over and applied to the substrate.  |
| <b>MOPPING:</b>                    | A uniform application of hot bitumen applied at E.V.T. to adhere roof components such as insulation and roofing membranes to substrates and to fuse impregnated felts together to form a membrane. |
| <b>NAILING STRIPS: (NAILERS)</b>   | Wood blocking or strips secured to roof decks, walls or curbs to permit anchoring of roofing membranes, insulation or membrane flashing.   |
| <b>OIL CANNING:</b>                | The buckling and minor deformation of light gauge sheet metal that results in a wavy or uneven finished appearance caused by stresses at their attachment points.                                  |
| <b>OVERBURDEN:</b>                 | Material in the top layer of the surface of the roof used as ballast or in which plants can grow.  |
| <b>P.V.C.:</b>                     | A thermoplastic membrane composed of a reinforced single ply sheet coated with P.V.C. produced by the polymerization of vinyl chloride. Membrane laps are bonded by hot air welding.               |
| <b>PARAPET:</b>                    | A structural extension or low wall installed at the roof edge extending above the roof surface.  |
| <b>PEDESTALS:</b>                  | Supports for roof mounted equipment or concrete pavers which are attached to the deck or rest on top of the roof surface.  |
| <b>PERIMETER:</b>                  | The outside edge of a self-contained roof area.  |
| <b>PLASTIC CEMENT:</b>             | A mixture of bitumen, fibres, fillers and a suitable solvent combined to form bituminous cement used as a sealing material.  |
| <b>PONDING:</b>                    | The accumulation or pooling of water at a low-lying area of a roof.  |

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| <b>POSITIVE DRAINAGE:</b>         | The criterion for judging proper slope for positive drainage is that there be reduced ponding water on the roof 72 hours after a rain during conditions conducive to drying.  |
| <b>PRIMER:</b>                    | A thin liquid bituminous or synthetic resin compound applied to a substrate to improve adhesion of membranes or adhesives.  |
| <b>PROTECTED MEMBRANE DESIGN:</b> | An insulated roofing system where the primary membrane is installed on a structural deck or an auxiliary levelling surface and Type 4 extruded polystyrene insulation and ballast are loose laid to cover (protect) the membrane. A separator sheet may be required between the insulation and roof membrane for certain membranes. Also known as an inverted roofing membrane assembly (IRMA). |
| <b>REGLET:</b>                    | A cut joint into a wall surface to act as a receiver for the attachment of the sheet metal counter flashing.  |
| <b>RESIDENTIAL ROOFING:</b>       | A residentially occupied building of four units or less with a total finished roof area not exceeding 372 m <sup>2</sup> . (4000 ft <sup>2</sup> ).   |
| <b>RIDGING:</b>                   | An upward elongated tenting or displacement of a membrane frequently occurring over insulation or deck joints.  |
| <b>ROOF COVERING:</b>             | Water shedding or waterproofing material that covers a substrate to protect the roof assembly from moisture penetration.  |
| <b>ROOF JACK:</b>                 | A flanged cone shaped metal flashing installed around roof penetrations such as chimney vents.  |
| <b>ROOFING GRAVEL:</b>            | Uniformly graded and washed round rock or crushed stone used as a protective surface layer over built-up roofing systems.   |
| <b>ROOF TERRACE:</b>              | An outdoor space constructed on the surface of a roofing membrane intended for occupancy by building occupants.   |
| <b>ROOT BARRIER:</b>              | A layer designed to prevent plant roots from penetrating the waterproofing membrane and building envelope.  |
| <b>SCUPPER:</b>                   | An opening through a parapet or wall which permits the drainage of water from the roof surface.   |
| <b>SEAM LAP SEALANT:</b>          | A roofing product developed to continuously seal exposed single ply membrane splice seam edges (laps) from water infiltration.  |
| <b>SEAM TAPE:</b>                 | A manufactured pressure sensitive adhesive tape used to seal/bond the laps of adjacent single ply thermoset membrane sheets.  |

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| <b>SEPARATOR SHEET:</b>                 | A material used to reduce transmission of stresses between roofing components, or to prevent layers from adhering together.  |
| <b>SHEET METAL FLASHING:</b>            | Galvanized or prefinished metal sheets which are formed and installed to protect bituminous membrane flashing from physical and solar damage.  |
| <b>SLEEPER:</b>                         | An element extending above the roof surface required to anchor or support light weight conduits or equipment where curbs or pedestals are not required.  |
| <b>SLIPPAGE:</b>                        | The sliding movement between adjacent layers within a roofing system.  |
| <b>SPUDDING:</b>                        | A manual method using a spudding bar to remove membrane protection from the surface of a built-up roofing membrane.  |
| <b>STRAMIT:</b>                         | A structural or insulating panel used for roof decking and roof insulation comprised of chemically treated straw fiber with a bonded paper covering.   |
| <b>STRUCTURAL ROOF DECK:</b>            | The structural component of the roof of a building capable of supporting the design dead and live loads, including the weight of the roof system.  |
| <b>SUBSTRATE:</b>                       | A supporting surface upon which the roof covering or membrane is adhered or applied.   |
| <b>SUBSURFACE ROOF DIVIDER:</b>         | A continuous waterproof membrane barrier used to segment areas within a conventional roof design assembly to control moisture migration below the primary roof membrane for a vegetated roof system. |
| <b>THERMAL BARRIER:</b>                 | A non-combustible material such as gypsum boards applied to a structural substrate to slow the temperature rise of roofing system components.  |
| <b>THERMAL BREAK:</b>                   | An element of low thermal conductivity placed in an assembly to reduce or prevent the flow of thermal energy between conductive materials.   |
| <b>THERMOGRAPHY:</b>                    | An investigative technique for detecting and measuring heat emitted from a building envelope by converting them to thermos images (photography).   |
| <b>TORCH ON:</b>                        | The process of thermally fusing membranes together by applying heat using propane torching equipment.  |
| <b>VAPOUR BARRIER/RETARDER:</b>         | A membrane used to retard the diffusion of moisture or water vapour into the components of a roofing system.   |
| <b>VECTOR MAPPING:</b>                  | A method of electronic leak detection that pinpoints breaches in the roof membrane by tracing the flow of an electric field across the membrane surface.   |
| <b>VEGETATED ROOF:<br/>(Green Roof)</b> | The creation of contained vegetated space on top of a human-made structure above, below, or at grade.  |

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**WARRANTY CERTIFICATE:** A joint undertaking by ARCA Warranty Ltd. and their Contractor Members assuring the building Owner that the roofing specification has been followed, that the workmanship meets ARCA roofing application standards, that a 2<sup>nd</sup> year anniversary inspection of the roofing system will be carried out and that any workmanship related deficiencies will be corrected at no cost to the Owner during the term of the warranty.

**WIND SCOUR:** The erosion of the membrane protection resulting from the effects of prevailing winds. Commonly occurs at roof corners and adjacent to roof mounted equipment.